

REMARKSDrawing

The specification is amended to mention the reference numerals as one of ordinary skill would understand the depiction in the drawing. Drawing correction is therefore not required.

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Specification

In response to the objections to the drawing, obvious erroneous reference numerals in the specification are corrected. Element 104, shown variously at positions "2", "3" and "4", clearly is a pin connected by an arm 103 which is part of the slider 102, and is unrelated to the mains cord 12 shown in Figs. 3-6. Hooked pin 122 is clearly shown in Fig. 2, while it and spring 123 are shown in Fig. 3.

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An obvious word error is corrected.

In view of the clear difference of opinion as to the meaning of the word "module," the specification is amended to incorporate a definition which those of ordinary skill in the art will recognize is the only meaning consistent with the disclosure and the claims as filed. In particular, "the two mains terminals and the speed switching means and the start means are connected mechanically and electrically to form a module, and all the electrical connections between the two mains terminals and the speed switching means and the start means are realized on the module" (page 2, lines 16-20). The module structure is shown clearly in Figs. 2-9, and in Fig. 10 the electrical connections between its components are clearly shown and distinguished from the electrical connections to other parts of the apparatus.

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In further support of this definition, copies of the main entry and the noun meanings pages are enclosed, as downloaded from the on-line version of the Merriam-Webster unabridged dictionary at <http://unabridged-merriam-webster.com/cgi-bin/unabridged>. It will be clear that the application as filed used the word "module" in the noun meaning 2.

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Claim 22

In response to the objection correctly raised in Paper No. 8, claim 22 is amended to clarify that "the module (9)" (line 21 on page 6 of this amendment) is the switching module referred to in the first line of claim 22 and claims 23-27 dependent thereon. Applicants regret confusion

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occurring when portions of certain claims were copied from the application as filed.

Applicants respectfully request reconsideration and withdrawal of the rejection based on the "means for actuating the speed switching means (60)". To make the mechanical interactions easier to understand, applicants have amended line 6 of page 9 to introduce a further "means for actuating" which supports the language of claim 22.

One of ordinary skill will understand that the means 60 is entirely within the module 9 (see Fig. 2). More particularly, applicants note that reference to the means 60 first appears on line 28 of page 7, with respect to the circuit diagram shown in Fig. 10. The means 60 is shown as the fixed contacts (contact lugs 93-96) and movable contacts (mating contacts 112-115 and contact links 108, 109) of what clearly is a multi-pole multi-position switch. These contacts are described at lines 3-16 of page 9. Thus actuation of the means 60 involves causing the movable contacts to move. A plurality of elements are involved in this causation, some of them being part of the module, and some of them being external to and separate from the module 9. Accordingly it is quite proper that claim 22 includes the means 60, and means for actuating (moving) the switch contacts.

Those of ordinary skill will recognize that actuating means 19 is the element or assembly which the user moves by finger pressure, to cause other parts to move the switch contacts. Actuating means 19 is clearly not part of the module 9. Therefore there must be something which is engaged by the actuating means 19 when the user changes speed settings. This something is a further actuating means portion of the module, shown in Fig. 2 as elements 103 and 104..

Claim 22 is moderately broad, and covers two possibilities: (1) the "means for actuating the speed switching means (60)" may be a part of the module which protrudes through the mixer housing so that a user can touch and move it directly; and (2) as disclosed in the preferred embodiment, the "means for actuating ..." is the portion of the module which is engaged when the handle or actuating means 19 is moved. In the disclosed embodiment, this portion includes the slider 102 and its associated parts including the pin 104.

This interaction is described in part at lines 24-26 of page 5). The slider 102 is clearly part of first module 9. Thus the slider pin 104 receives "a first mechanical input" from the pin which is associated with "actuating means 19" of the second module 44.

Accordingly applicants submit that they clearly had "possession of the claimed invention" because they described that a user operates first module 44 to cause what is claimed as "a first

mechanical input" to the slider 102 of module 9.

Claim 25 is amended to correct an inadvertent word processing error. It may be noted that claim 22 corresponds generally in scope with original claim 7.

5 Art rejection - US 3,533,600 (Gerson)

To the extent that the rejection over Gerson might be maintained against claims 22 and 28, reconsideration is requested because nothing in Gerson teaches nor at all suggests a module as claimed herein. In fact, Gerson clearly teaches away from the claimed invention.

Applicants submit that patentable weight must be given to the word module, which was
10 used in the specification as filed with a meaning which all persons of ordinary skill in the art would recognize, and which is now spelled out with particularity by the specification as amended. This meaning is the same as the only one of the definitions given in the Unabridged Merriam-Webster Dictionary which is applicable to appliances such as a hand-held mixer. As a result applicants' attorney believes that the Gerson patent is merely of background interest with respect to the instant
15 claims.

A critical element of the claimed invention is that the speed switching means (60), the start means (61) and the two mains terminals (10, 11) are connected electrically and mechanically to form a module (9). This module is installed physically as one piece, such as module 9 shown in Figs. 1 and 3, and the component parts from which it is assembled may be such as shown in the
20 exploded view Fig. 2. It is clear from the comparison of the prior art at line 25 of page 1 through line 12 of page 2, with the invention at lines 16-27 of page 2 and its advantages at line 28 of page 2 through line 18 of page 3, that "module" as used herein refers to a detachable unit with a specific function (see, e.g., meaning 2 in Webster's New World Dictionary, copy attached). More particularly, the switching means and start means and mains terminals are connected mechanically
25 to form a module on which their electrical interconnections are realized. It is inherent that this mechanical connection is made before the module is installed in the apparatus. Any other interpretation does violence to the teachings of the specification which supports the claims and to the common usage of the word module by electromechanical engineers. This is different from, and not obvious over, the prior art in which the switches and mains terminals are separate units or
30 modules, each of which is separately installed and connected..

Gerson is concerned with a substantially different apparatus, and features electrically interconnected parts which clearly will be mounted to the housing serially in whatever order is most convenient, first one switch, and then the other, while the connector may be mounted to the housing first, middle or last. Further, because of the relationship between the functions of the Gerson
5 controls and the user holding the double-ended appliance, integration of the switches and the claimed electrical connections on one reasonably compact module which will fit within such a dual purpose machine would be impossible, and therefore is not obvious over Gerson.

With respect to paragraph 3 on page 4 of paper No. 10, applicant submits that far more is at stake here than the "method of production." The mechanically and electrically interconnected
10 structures are different, because the connections within the module are direct, and do not require one or more intermediary elements as is the case in Gerson.

The mechanical and electrical interconnections of Gerson are made more comprehensible by understanding the dual functions of the apparatus. Ejector button 56 (col. 3, lines 32-56) and switch 104 at one end are involved with the mixer blade ejection and operation. At the other end of
15 the motor and housing, switch 120 energizes the same motor to drive cutting blade actuators extending from that other end, via a separate transmission. As will be made clear from the detailed analysis below, one of ordinary skill will understand that a user holds the motor housing with the thumb toward switch handle 106 when cutting with reciprocating blades 75, and turns the appliance around to hold the housing with the thumb adjacent the switch handle 104 when mixing or beating
20 with rotary tools inserted into actuators 38.

Further, the paragraph at lines 31-46 describes the desirability of mechanical interlocks which prevent continuous operation when no tools are inserted and also when cutting blades are engaged with the actuators 74. Thus no one of ordinary skill would describe Gerson as teaching "start means ... for starting the motor ... at the higher speed". To the contrary, Gerson teaches and
25 suggests only an apparatus with a cutting function switch (high speed only) and with a beating/mixing speed switch, these switches being mounted to the housing independently of each other. Further, if one switch failed, it would easily be replaced without need to replace the other switch. To the contrary, if one of the switches of the instant invention failed, it is simple to replace the module 9.

30 Responding to specific allegations in Paper No. 8, applicants submit that elements 98, 108,

110, 119, 120 and 125, described as teaching a switching module, are not and cannot reasonably be made parts of one module.

Element 98 is a line cord connector located to one side of the motor commutator, far removed from the momentary contact switch 106 (col. 4, lines 52-54) and the speed control switch 104 (col. 4, lines 50-52) and its handle 116 (col. 4, lines 69-70). One of ordinary skill would conclude that this connector is mounted mechanically to the housing 12. It is described as being "positioned relative to the housing 12" (col. 4, lines 31-37). Thus the connector 98 is not connected mechanically either to the switch which includes the element 110, or to the switch which includes elements 119 and 120, and does not form a module with either or both of them.

Element 108 is the wafer or contact assembly of wafer switch 104 (col. 4, lines 55-58).

Terminal 110 (shown in Fig. 4 as being part of wafer switch 104) is connected by a wire 125 to one of the fixed contacts 119 and to movable contact 120, while the other of the fixed contacts 119 and the movable contact 120 is connected to the motor high speed winding (col. 5, lines 18-23). Switch 104 with its various parts is itself a module which would probably be assembled, and wires 20 and 125 connected to it, before mounting in the housing 12. The speed control switch has a plurality of contacts respectively connected by respective wires 20 to taps on the motor field winding (col. 2, lines 66-69). One of ordinary skill would conclude that this speed control switch is separately mounted mechanically to the housing 12.

Element 120 is a momentary contact switch (col. 5, lines 8-12) having an actuating button 106 mechanically connected to movable contact 120, and fixed contact 119. The switch 120 is fastened to the housing 12 at a location far from both the wafer switch and the line cord connector. This switch is preferably connected to the high speed winding of the motor, and is used when the apparatus is used for cutting or slicing (col. 1, lines 65-67; col. 4, lines 46-49). Switch 120 with its various parts is itself a module which would probably be assembled, and wires 125 connected to it, before mounting. One of ordinary skill would conclude that this cutting/slicing switch is separately mounted mechanically to the housing 12. An interlock is preferably provided to prevent continuous operation via switch 104 when the apparatus is being used for cutting or slicing (col. 1, lines 68-72).

Accordingly no one of ordinary skill would call the combination of switch 104 and switch 120 and connector 98, in the beater/knife housing, a module or parts of a module. Claims 22 and

28 are therefore not anticipated by Gerson.

Claims 31-33 are patentable over Gerson for all the reasons given with respect to the independent claims.

Regarding claims 23, 30 and 39, nothing in Gerson suggests that there be a switching module, and even less that such a module have in addition an interference suppression means physically mounted on and electrically connected to that module.

Regarding claim 24 and 34, nothing in Gerson suggests that there be a switching module, and even less that such a module have leads fixedly connected to, and therefore being part of, the module so that the electrical installation merely requires attaching the respective ends of those wires to the motor terminals.

Regarding claims 25-27, applicants believe it is clear that they were intended to depend from claim 22 or a claim dependent therefrom. Nothing in Gerson suggests, nor is alleged to suggest, a module having a supporting member and contact strips and other parts extending parallel to, or movable with respect to that member parallel to a strip direction, as claimed herein. Accordingly claims 25 and 35, and those dependent therefrom, are patentable.

CONCLUSION

All formal matters are complied with, and the claims are shown to be patentable over the cited art. Early favorable action on the merits of the application is respectfully requested.

Respectfully submitted,

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